

THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Examiner: Nathan Jeffrey Newhouse

Group Art Unit: 3727

In re application of:

Carlos Orlando Vilacha Zanoni

Serial No.: 09/745,098

Filed: December 20, 2000

CROWN CLOSURE HAVING A  
REDUCED RADIUS AND METHOD  
OF MANUFACTURE

Attorney Docket No. 286765-00001

**APPELLANT'S SUPPLEMENTAL BRIEF ON APPEAL**

September 7, 2007

Commissioner for Patents  
MAIL STOP APPEAL BRIEF - PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is in further response to the Order Returning Undocketed Appeal to Examiner, dated August 28, 2007, the time for response being before September 28, 2007.

No fee is believed to be required, however, if such a fee is due, please charge any additional fee or credit any overpayment to Eckert Seamans Cherin & Mellott, LLC Deposit Account No. 02-2556. A duplicate copy of this sheet is enclosed.

## REMARKS

On July 8, 2005 Appellant's Brief On Appeal was filed in the above-referenced action. On September 26, 2005, Appellant received the Examiner's Answer. On November 11, 2005, Appellant filed a Reply to Examiner's Answer. The argument in Appellant's Brief included references to cases such as *In re Geiger*, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987), which held that "obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, *absent some teaching, suggestion, or incentive supporting combination*," and *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which stated that "both the suggestion [to make the claimed apparatus] and the reasonable expectation of success must be found in the prior art, not in the Applicants' disclosure."

On April 30, 2007 the U.S. Supreme Court issued the decision in *KSR International Co. v. Teleflex Inc.*, 500 U.S. \_\_\_, 2007 WL 1237837 (2007). *KSR* held, *inter alia*, that the "teaching, suggestion, motivation" test should not be the only test applicable to the determination of obviousness under 35 U.S.C. § 103(a). In the decision affirming the Examiner's rejections in this appeal, the only case cited by the Board in its analysis is *KSR*. Appellant believes that the *KSR* decision is a "recent relevant decision" under 37 CFR § 41.52 (a)(2).

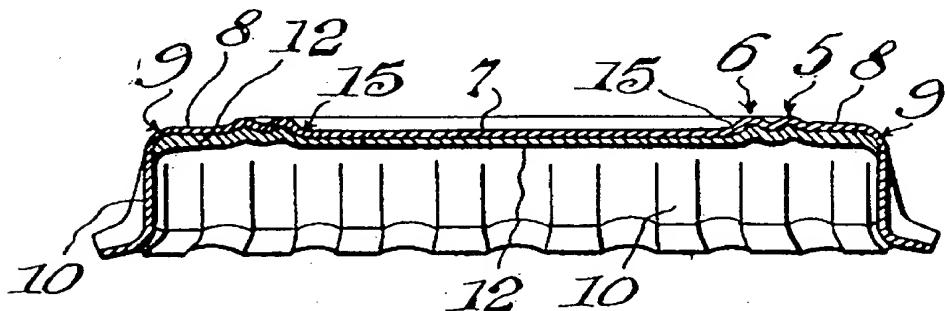
Accordingly, Appellant requests permission to supplement the original Brief and address the issues on Appeal under the *KSR* standard. Appellant relies upon the Summary of the Claimed Subject Matter, Grounds of Rejection to be Reviewed on Appeal, etc. as set forth in the original brief.

## Argument

### Claims 1 and 7; Rejected Under 3 U.S.C. § 102(b)

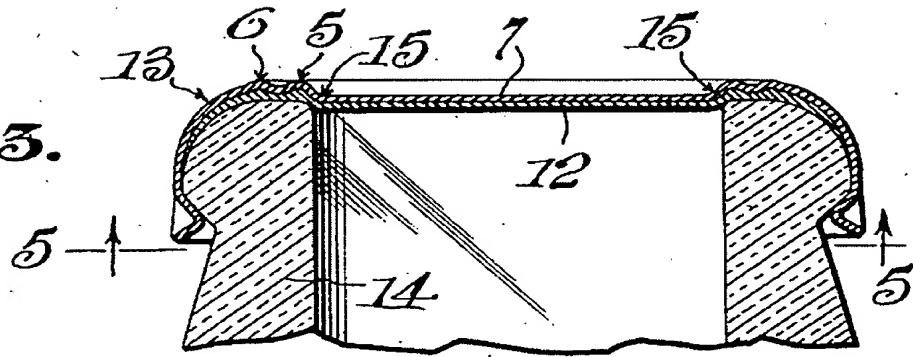
Claims 1 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Punite* (U.S. Patent No. 2,327,455). *Punite* discloses a crown closure structured to engage a bottle without a pad or liner. The closure is shown in both a pre-application shape (Figure 2) and a post-application shape (Figure 3). The closure includes a body portion 7 and a sealing portion 8. Page 1 right col., lines 46-47. The sealing portion 8 includes a “turn” 9 and a skirt 10. Page 1 right col., lines 52-53. The skirt 10 is crimped. Page 1 right col., line 54. The “crimps” are more commonly referred to as serrations. As shown in Figure 2, reproduced below, the skirt serrations extend from the bottom of the skirt to, approximately, 70% to 90% of the skirt height, which is over 50% of the length between the distal tip of the skirt and the outer rib “6.” (There is an error on Figure 2 as the specification states that the outer rib should be reference number 6 and not reference number 5 as shown, *see* page 1 right col., line 45-46) The serrations do not, however, extend into the “turn” at point 9. It is further noted that, and is obvious by comparing Figure 2 to Figure 3, the cap in Figure 2 is not adapted to have the same shape as the mouth contour of a bottle.

*Fig.2.*



When the *Punite* crown closure engages a bottle, as shown in Figure 3 reproduced below, approximately the lower 10-20% of the skirt does not adapt to the curved shape of the bottle.

**Fig. 3.**



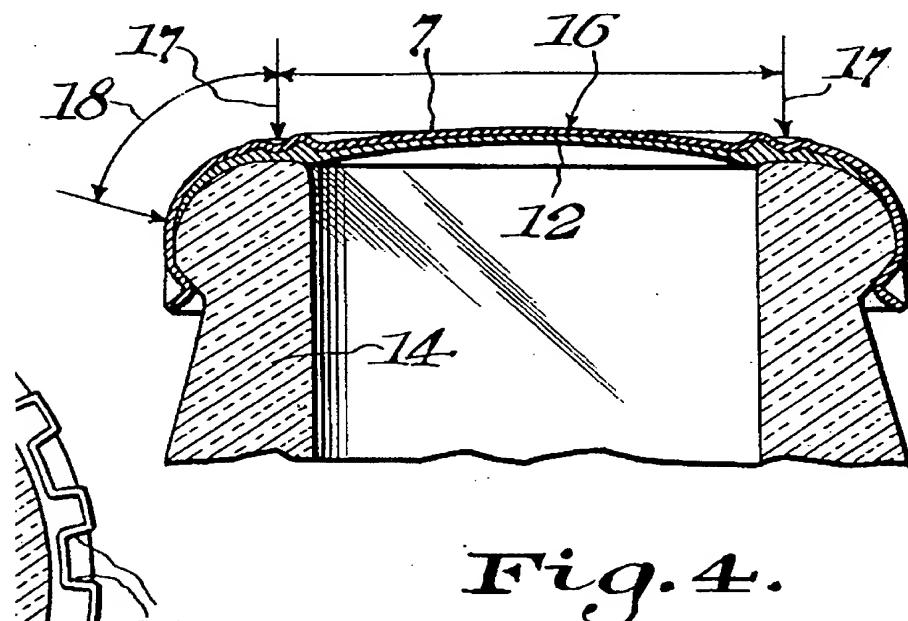
That is, as noted at Page 2 left col., lines 20-27, “[w]hen the cap is applied to the neck of a bottle or other container in the manner illustrated if Figure 3 of the drawing, the sealing portion 8 of the crown top and the turn thereof at 9 *into the skirt 10* are reshaped or deformed as at 13 to conform perfectly to the sealing surface presented by the neck 14 of the bottle ....” (emphasis added). Thus, the deformation at 13 includes the skirt 10 which, as noted above, includes the serrations.

The Examiner has characterized the deformation at 13 as being equivalent to the “curved portion” as recited in the present application. March 24, 2005 Office Action at page 5, lines 1-3. As noted above, the deformation 13 only exists in the **post-application** form of the cap shown in Figure 3. The Examiner, however, further asserts that, “[c]learly **Figure 2** of *Punte* shows the serrations (lines in skirt 10) stop short of the *curved portion*.” *Id.* at lines 4-5 (emphasis added). As noted above, Figure 2 shows the pre-application shape of the cap. Thus, the Examiner has used the post application shape of Figure 3 to define the “curved portion” which conforms to the shape of the bottle, then argues that the serrations shown in the pre-application shape of Figure 2 do not extend past the “curved portion.” It appears that the Examiner is attempting to equate the “turn” of Figure 2 with the “curved portion” of Figure 3.

The Examiner, however, cannot have it both ways. If the “curved portion” is what is shown in Figure 3, the serrations obviously extend into the curved portion. Conversely, if the Examiner wishes to define the “curved portion” as point 9 of Figure 2, the Examiner cannot assert that the “curved portion” is adapted to the shape of the

bottle. That is, the turn at point 9 is far too acute to conform to the shape of the bottle shown in Figure 3.

By way of clarification, the "curved portion" is shown quite clearly by arc 18 shown in Figure 4, reproduced below, which represents the area in which a seal is affected. As noted above, the serrations extend well over 50% of the length between the distal tip of the skirt and the outer rib. Moreover, the *Punte* specification states that the skirt, along with the serrations, are included in the "deformation" which the Examiner has equated with the "curved portion."



**Fig. 4.**

Thus, the Examiner has failed to show where the *Punte* reference discloses a cap having both a shape conforming to the bottle and a lack of serrations in the curved portion.

The Examiner further asserts that "none of the other figures shown (sic) that the serrations do extend into the curved portion of the crown closure." March 24, 2005 Office Action at page 5, lines 5-7. This argument is baseless as Figure 2 shows a cross-sectional view of the cap pre-application, wherein the serrations on the back side of the cap may be seen. Figures 3 and 4, however, show cross-sectional views of the cap post-application, that is, on a bottle, wherein the serrations cannot be shown as

the serrations are behind the bottle. As stated above, the serrations extend over more than 50% of the length between the distal edge of the skirt and the outer rib. This length extends into the “curved portion” as defined by the Examiner, *e.g.* the deformation 13. Moreover, the *Punte* specification states that the skirt, which includes the serrations, are part of the “deformation 13.”

It is further noted that the purpose on the *Punte* reference is to provide a “padless” crown closure. As set forth at page 2 left col., lines 7-12, “[i]t is customary to provide sealing pads of cork or other suitable compressible material in crown caps of the usual type, but it is the purpose of the present invention to provide a crown cap which will effect an efficient seal without such sealing pad inserts.” Instead, the *Punte* reference discloses the use of a sealing compound. Thus, it is clear that those skilled in the art consider a pad or liner to be different from a sealing compound. The present invention recites a liner which is not present in the *Punte* reference.

As stated in MPEP §2131:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference....  
The identical invention must be shown in as complete detail as is contained in the ... claim.

*Id.*, citing (*Verdigaal Brothers v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, (Fed. Cir. 1989)). It is submitted that upon reading the *Punte* reference, one skilled in the art would not consider having a crown closure wherein the curved portion is adapted to be the same shape as the mouth contour of a bottle and wherein the serrations do not project into the curved portion as set forth in both claims 1 and 7.

Accordingly, Appellant requests that the Examiner’s rejection of claims 1 and 7 under 35 U.S.C. §102(b) be reversed.

#### Claims 2-6 and 8-12; Rejected Under 35 U.S.C. § 103(a)

Claims 2-6 and 8-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Punte* (U.S. Patent No. 2,327,455) in view of *Leenaards* (U.S. Patent No. 3,827,594). *Punte* and its failure to disclose the elements of the present invention are discussed above. *Leenaards* discloses a crown closure that is shaped to accommodate a seal that engages the lateral face of the bottle to which the closure is

attached. That is, the seal is located between the curved portion of the crown closure and the outer side of the bottle. As such, the curved portion of the shell cannot be structured to have the same shape as the container to which the closure will be attached as the curved portion must be shaped to provide a space for the seal. This space is identified by reference number 18 on Figure 2 and described at Col. 4, lines 3-4. *Leenaards* notes that *after* deformation, *i.e.* the crimping procedure, the closure is shaped to the mouth of the container.

Appellant notes that the purpose of the *Punte* invention is to have a crown closure that is “padless,” that is, without a liner, whereas the purpose of the *Leenaards* invention is to have a lateral liner. As one cannot have a crown closure that is both “padless” and incorporates a “lateral liner,” one skilled in the art would not combine these references.

Moreover, with regard to the determination of obviousness under 35 U.S.C. § 103, the Supreme Court has recently stated that:

Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, *it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.* This is so because inventions in most, if not all, instances rely on building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

*KSR International Co. v. Teleflex Inc.*, \_\_\_\_ U.S. \_\_\_, \_\_\_, 2007 WL 1237837 (2007), (Slip Opinion at 14-15) (emphasis added). In addition, the Supreme Court also noted that:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, *this analysis should be made explicit.* See *In re Kahn*, 441 F.3d 977, 988 (Fed Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, *there must be some articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness*”).

*Id.*, at \_\_\_\_ (Slip Opinion at 14) (emphasis added). It is noted that the Supreme Court included an extended discussion reciting the nature of the inventions disclosed in the prior art and then several paragraphs identifying the rationale and reasons that the cited art could be combined and why one skilled in the art would make such a combination. *Id.*, at \_\_\_\_ (Slip Opinion at 3-6, 20-22).

With regard to combining known elements of an invention, the Supreme Court further stated that, “[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *Id.*, at \_\_\_\_ (Slip Opinion at 14). This holding comports with *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) which held that, although some of the cited references, individually, may have some of the claimed inventions’ features, “one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention.” *Id.* at 1075. Instead, to reach the proper conclusion under §103:

the decision maker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made. In light of *all* the evidence, the decision maker must then determine whether...the claimed invention as a whole would have been obvious at *that* time to *that* person.

*Id.* at 1073-74.

The Examiner has not properly supported the rejection under 35 U.S.C. § 103(a) and under *KSR International*. In the final Office Action, the Examiner merely identified selected elements from the cited art, *e.g.* the general elements of a crown closure (*Punte*) and another reference that discloses specific sizes of crown closures (*Leenaards*). The Examiner then stated that, “As *Leenaards* teaches that these dimensions are known in the crown closure art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these dimensions to make the crown closure of *Punte*.” The March 24, 2005 Office Action at 3-4. This sentence is the only statement regarding the motivation to combine the references.

Appellant believes that single conclusory sentence is not sufficient to qualify as an “articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness” and that the Examiner has failed to make the analysis explicit. Such an explicit analysis would be similar to the analysis provided by the

Supreme Court in *KSR*, which noted the elements in question and detailed how one skilled in the art would assemble, and even alter, these elements to arrive at the invention recited in the patent at issue.

Moreover, the limited analysis provided by the Examiner has a number of logical flaws. First, the Examiner fails to account for the fact that the *Punte* closure includes a liner and the *Leenaards* closure does not. It is well known to those skilled in the art that the dimensions of the crown must be altered to accommodate a liner. Similarly, the *Leenaards* closure is structured to be applied to a bottle having a thread, that is, lateral sealing surface 3'. It is also well known in the art that the dimensions of the crown must be altered to accommodate such a thread. Given that *Punte* includes a liner but does not include a thread, and, *Leenaards* includes a thread but not a liner, one skilled in the art would not look to the dimensions disclosed in *Leenaards* as being relevant to the closure disclosed in *Punte*.

Finally, neither reference teaches a crown closure wherein the curved portion is adapted to be the same shape as the mouth contour of a bottle and wherein the serrations do not project into the curved portion as set forth in Claims 2-6 and 8-12.

Accordingly, Appellant requests that the Examiner's rejection of Claims 2-6 and 8-12 under 35 U.S.C. §103(a) be reversed.

Claim 13; Rejected Under 35 U.S.C. § 103(a)

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Punte* (U.S. Patent No. 2,327,455) in view of *Ferngren* (U.S. Patent No. 2,099,056). *Punte* and its failure to disclose the elements of the present invention are discussed above. *Ferngren* discloses a flexible plastic cap for a flexible bottle. See, Col. 1, lines 40-47. *Ferngren* does not discuss a crown closure. As crown closures and plastic caps are different types of closures, these references cannot be combined. It is again noted that, to support a rejection under 35 U.S.C. § 103(a), an Examiner must provide an explicit analysis that includes an articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness.

In this rejection, the Examiner has again provided a single conclusory sentence to support the proposed combination of three references. A single sentence is not an explicit analysis that includes an articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness. The Examiner has not,

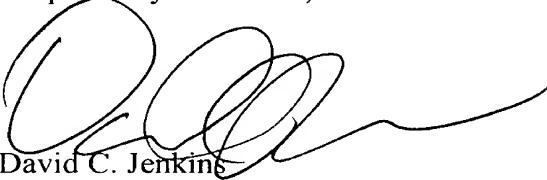
for example, explained why one skilled in the art of stamped metal closures would look to a reference disclosing a flexible plastic cap. That is, one skilled in the art would not find the interaction between a flexible plastic and a fulcrum to be relevant to the problems relating to a generally rigid metal and a fulcrum.

Accordingly, Appellant requests that the Examiner's rejection of Claim 13 under 35 U.S.C. §103(a) be reversed.

**Conclusion**

It is submitted that Claims 1-13 are patentable over the prior art. Therefore, Appellant respectfully requests that the Board reverse the Examiner's rejections of Claims 1-13 and remand the application to the Examiner for the issuance of a Notice of Allowance.

Respectfully submitted,



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